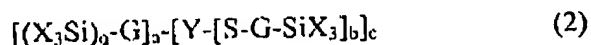
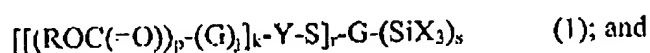


14300G-14

## IN THE CLAIMS

1. (Currently Amended) A blocked mercaptosilane selected from the group consisting of:



wherein

i) for structures (1) and (2), Y is a polyvalent species  $(\text{Q})_z\text{A}(=\text{E})$  selected from the group consisting of  $-\text{C}(=\text{NR})-$ ;  $-\text{SC}(=\text{NR})-$ ;  $-\text{SC}(=\text{O})-$ ;  $-\text{S}(=\text{O})-$ ;  $-\text{S}(=\text{O})_2-$ ;  $-\text{OS}(=\text{O})_2-$ ;  $(-\text{NR})\text{S}(=\text{O})_2-$ ;  $-\text{SS}(=\text{O})-$ ;  $-\text{OS}(=\text{O})-$ ;  $(-\text{NR})\text{S}(=\text{O})-$ ;  $-\text{SS}(=\text{O})_2-$ ;  $-(\text{S})\text{P}(=\text{O})-$ ;  $-(\text{S})\text{P}(=\text{O})_2-$ ;  $-(\text{S})\text{P}(=\text{S})-$ ;  $-(\text{S})\text{P}(=\text{S})_2-$ ;  $(-\text{NR})_2\text{P}(=\text{O})-$ ;  $(-\text{NR})(-\text{S})\text{P}(=\text{O})-$ ;  $(-\text{O})(-\text{NR})\text{P}(=\text{O})-$ ;  $-(\text{O})\text{P}(=\text{O})-$ ;  $(-\text{NR})\text{P}(=\text{O})-$ ;  $(-\text{NR})_2\text{P}(=\text{S})-$ ;  $(-\text{NR})(-\text{S})\text{P}(=\text{S})-$ ;  $(-\text{O})(-\text{NR})\text{P}(=\text{S})-$ ;  $-(\text{O})\text{P}(=\text{S})-$ ; and  $-(\text{NR})\text{P}(=\text{S})-$ ;

ii) for structure (1), Y is a polyvalent species  $(\text{Q})_z\text{A}(=\text{E})$  selected from the group consisting of  $-(\text{S})\text{P}(=\text{O})-$ ;  $-\text{P}(=\text{O})(-)-$ ;  $-(\text{S})\text{P}(=\text{S})-$ ;  $-\text{P}(=\text{S})(-)-$ ;  $-(\text{O})\text{P}(=\text{O})-$ ; and  $-(\text{O})\text{P}(=\text{S})-$ ;

wherein the atom A, attached to unsaturated heteroatom E is attached to the sulfur which in turn is linked via a group G to the silicon atom;

each R is chosen independently from hydrogen, straight, cyclic, or branched alkyl that may or may not contain unsaturation, alkenyl groups, aryl groups, and aralkyl groups, with each R containing from 1 to 18 carbon atoms;

each G is independently a monovalent or polyvalent group derived by substitution of alkyl, alkenyl, aryl, or aralkyl wherein G can contain from 1 to 18 carbon atoms, and if G is univalent, G can be a hydrogen atom; X is independently selected from the group

143006-14

consisting of -Cl, -Br, RO-, RC(=O)O-, R<sub>2</sub>C=NO-, R<sub>2</sub>NO-, R<sub>2</sub>N-, -R, and -  
(OSiR<sub>2</sub>)<sub>i</sub>(OSiR<sub>3</sub>)<sub>j</sub> wherein each R is as above and at least one X is not -R;

p is 0 to 5; r is 1 to 3; z is 0 to 2; q is 0 to 6; a is 0 to 7; b is 1 to 3; j is 0 to 1, but it may be 0 only if p is 1; c is 1 to 6; t is 0 to 5; s is 1 to 3; k is 1 to 2; with the provisos that (I) if A is carbon, sulfur, or sulfonyl, then (i) a + b is 2 and (ii) k is 1; (II) if A is phosphorus, then a + b is 3 unless both (i) c is greater than 1 and (ii) b is 1, in which case a is c + 1; and (III) if A is phosphorus, then k is 2.

2. (Original) A blocked mercaptosilane according to claim 1 wherein R is selected from the group consisting of methyl, ethyl, propyl, isobutyl, phenyl, tolyl, phenethyl, norbornyl, norbornenyl, ethylnorbornyl, ethylnorbornenyl, ethylcyclohexyl, ethylcyclohexenyl, and cyclohexylcyclohexyl.

3. (Previously Presented) A blocked mercaptosilane according to claim 1 according to formula (1).

4. (Withdrawn) A blocked mercaptosilane according to claim 1 according to formula (2).

5. (Original) A blocked mercaptosilane according to claim 1 which has been partially hydrolyzed.

6. (Previously Presented) A blocked mercaptosilane according to claim 1 wherein Y is selected from the group consisting of: -SC(=O)-; -S(=O)-; -OS(=O)-; -(-S)P(=O)-; and -P(=O)(-)-.

143006-14

7. (Withdrawn) The blocked mercaptosilane of claim 1 wherein Y is selected from the group consisting of  $-C(=NR)-$  and  $-SC(=NR)-$ .

8. (Withdrawn) The blocked mercaptosilane of claim 1 wherein Y is selected from the group consisting of  $-S(=O)_2-$ ;  $-OS(=O)_2-$ ;  $(-NR)S(=O)_2-$ ;  $-SS(=O)-$ ;  $(-NR)S(=O)-$ ;  $-SS(=O)_2-$ .

9. (Withdrawn) The blocked mercaptosilane of claim 1 wherein Y is selected from the group consisting of  $(-S)_2P(=O)-$ ;  $(-S)P(=O)-$ ;  $-P(=O)(-)_2$ ;  $(-S)_2P(=S)-$ ;  $(-S)P(=S)-$ ;  $-P(=S)(-)_2$ ;  $(-NR)_2P(=O)-$ ;  $(-NR)(-S)P(=O)-$ ;  $(-O)(-NR)P(=O)-$ ;  $(-O)(-S)P(=O)-$ ;  $(-O)_2P(=O)-$ ;  $(-O)P(=O)-$ ;  $(-NR)P(=O)-$ ;  $(-NR)_2P(=S)-$ ;  $(-NR)(-S)P(=S)-$ ;  $(-O)(-NR)P(=S)-$ ;  $(-O)(-S)P(=S)-$ ;  $(-O)_2P(=S)-$ ;  $(-O)P(=S)-$ ; and  $(-NR)P(=S)-$ .

10. (Original) A blocked mercaptosilane according to claim 1 wherein the sum of the carbon atoms within the G groups within the molecule is from 3 to 18.

11. (Original) A blocked mercaptosilane according to claim 1 wherein X is selected from the group consisting of methoxy, ethoxy, isobutoxy, propoxy, isopropoxy, acetoxy, and oximate.

12. (Original) A blocked mercaptosilane according to claim 1 wherein p is 0 to 2; X is  $RO-$  or  $RC(=O)O-$ ; R is selected from the group consisting of hydrogen, phenyl, isopropyl, cyclohexyl, isobutyl; and G is a substituted phenyl or substituted straight chain alkyl of  $C_2$  to  $C_{12}$ .

143006-14

13. (Withdrawn) A blocked mercaptosilane of the formula  
 $X_3SiGSC(=O)GC(-O)SGSiX_3$  wherein

each R is chosen independently from hydrogen, straight, cyclic, or branched alkyl that may or may not contain unsaturation, alkenyl groups, aryl groups, and aralkyl groups, with each R containing from 1 to 18 carbon atoms;

each G is independently a divalent group derived by substitution of alkyl, alkenyl, aryl, or aralkyl, wherein G can contain from 1 to 18 carbon atoms, with the proviso that G is not such that the blocked mercaptosilane would contain an  $\alpha,\beta$ -unsaturated carbonyl including a carbon-carbon double bond next to the thiocarbonyl group;

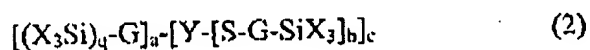
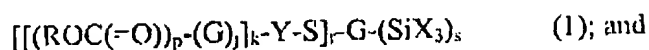
X is independently selected from the group consisting of -Cl, -Br, RO-, RC(-O)O-,  $R_2C=NO$ -,  $R_2NO$ -,  $R_2N$ -, -R and  $-(OSiR_2)_t(OSiR_3)$  wherein each R is as above and at least one X is not -R; and

t is 0 to 5.

14- 32 (Cancelled)

143006-14

33. (Withdrawn) A blocked mercaptosilane selected from the group consisting of:



wherein

Y is  $-\text{OC}(=\text{O})-$ ;

each R is chosen independently from hydrogen, straight, cyclic, or branched alkyl that may or may not contain unsaturation, alkenyl groups, aryl groups, and aralkyl groups, with each R containing from 1 to 18 carbon atoms;

each G is independently a monovalent or polyvalent group derived by substitution of alkyl, alkenyl, aryl, or aralkyl; wherein G can contain from 1 to 18 carbon atoms, and if G is univalent, G can be a hydrogen atom;

X is independently selected from the group consisting of  $-\text{Cl}$ ,  $-\text{Br}$ ,  $\text{RO}-$ ,  $\text{RC}(=\text{O})\text{O}-$ ,  $\text{R}_2\text{C}=\text{NO}-$ ,  $\text{R}_2\text{NO}-$ ,  $\text{R}_2\text{N}-$  and  $-\text{R}$  wherein each R is as above and at least one X is not  $-\text{R}$ ;

p is 0 to 5; r is 1 to 3; z is 0 to 2; q is 0 to 6; a is 0 to 7; b is 1 to 3; j is 0 to 1, but it may be 0 only if p is 1; c is 1 to 6; t is 0 to 5; s is 1 to 3; k is 1 to 2; with the provisos that (I) if A is carbon, sulfur or sulfonyl, then (i)  $a + b$  is 2 and (ii) k is 1; (II) if A is phosphorus, then  $a + b$  is 3 unless both (i) c is greater than 1 and (ii) b is 1, in which case  $a$  is  $c + 1$ ; and (III) if A is phosphorus, then k is 2.

143006-14

34. (Withdrawn) A blocked mercaptosilane according to claim 33 wherein R is selected from the group consisting of methyl, ethyl, propyl, isobutyl, phenyl, tolyl, phenethyl, norbornyl, norbornenyl, ethylnorbornyl, ethylnorbornenyl, ethylcyclohexyl, ethylcyclohexenyl, and cyclohexylcyclohexyl.

35. (Withdrawn) A blocked mercaptosilane according to claim 33 according to formula (1).

36. (Withdrawn) A blocked mercaptosilane according to claim 33 according to formula (2).

37. (Withdrawn) A blocked mercaptosilane according to claim 33 which has been partially hydrolyzed.

38. (Withdrawn) A blocked mercaptosilane according to claim 33 wherein the sum of the carbon atoms within the G groups within the molecule is from 3 to 18.

39. (Withdrawn) A blocked mercaptosilane according to claim 33 wherein X is selected from the group consisting of methoxy, ethoxy, isobutoxy, propoxy, isopropoxy, acetoxy, and oximato.

143006-14

40. (Withdrawn) A blocked mercaptosilane according to claim 33 wherein p is 0 to 2; X is RO- or RC(=O)O-; R is selected from the group consisting of hydrogen, phenyl, isopropyl, cyclohexyl, isobutyl; and G is a substituted phenyl or substituted straight chain alkyl of C<sub>2</sub> to C<sub>12</sub>.